

**PROCEDURE FOR THE VERIFICATION OF THE  
GILLMORE NEEDLES  
ASTM C 266**

**A. PURPOSE**

The purpose of this procedure is to verify the critical dimensions and weight of the initial and final setting time needles. This verification is made annually (see note). ASTM requires a calibration every 30 months.

**B. APPARATUS REQUIRED**

1. Calibrated Balance capable of reading within the desired range.
2. Calibrated calipers.
3. Square.

**C. PROCEDURE**

1. Weigh the initial time setting needle and record the weight.
2. Measure the tip diameter with the caliper and verify the planeness of the tip. Record the tip diameter.
3. Repeat Steps 1 and 2 for the final time setting needle.

**D. TOLERANCE**

All tolerances are as set in ASTM C 266, Section 5.6-5.6.3.

**Note:** The CCRL inspection shall serve as the verification record.

Verified By: _____	Date: _____
Equipment: <u>Gillmore Needles</u>	Location (Lab): _____
Identification No.: _____	Verification Frequency: <u>12 months</u>
Previous Verification Date: _____	Next Due Date: _____
Verification Equipment Used:    Calibrated balance, SN: _____    Calibrate calipers, SN: _____	
Carpenter's square, SN: _____	
Verification Procedure: <u>(In-house) OMR-CVP-45 / ASTM C 266</u>	

### Initial Setting – Time Needle

Weight 112.9 – 113.9 g.....

Tip Diameter 2.07 – 2.17 mm (0.082 – 0.084 in.).....

Needle tip cylindrical	4.3 – 5.3 mm (0.169 – 0.209 in.)	YES	NO
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Needle ends plane and at right angles to axis of rod? YES NO

### Final Setting – Time Needle

Weight 453 – 454.1g.....

Tip Diameter 1.01 – 1.11 mm (0.040 – 0.044 in.).....

Needle tip cylindrical	4.3 – 5.3 mm (0.169 – 0.209 in.)	YES	NO
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Needle ends plane and at right angles to axis of rod? YES NO